



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,952	05/16/2005	Volker Hennige	032301.418	1666
25461 7590 05/27/2009 SMITH, GAMBRELL & RUSSELL SUITE 3100, PROMENADE II 1230 PEACHTREE STREET, N.E. ATLANTA, GA 30309-3592			EXAMINER MERCADO, JULIAN A	
			ART UNIT 1795	PAPER NUMBER
			MAIL DATE 05/27/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/534,952	Applicant(s) HENNIGE ET AL.	
	Examiner JULIAN MERCADO	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) 7-17, 19-23 and 31-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 18, 24-30 and 49 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>May 11, 2009, September 29, 2005 and May 16, 2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

Claims 7-17, 19-23, 31-48 and 49-54 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 30, 2009.

Claims 1-6, 18, 24-30 and 49 are pending for consideration.

Information Disclosure Statement

The Information Disclosure Statement (IDS) filed on May 11, 2009, September 29, 2005 and May 16, 2005 has been considered by the examiner.

Claim Interpretation

The examiner notes the definition on page 6 of the specification for the claimed pyrogenic powder, "pyrogenic oxidic powder is meant a finely divided, highly disperse oxide of an element of groups 3A, 4A, 3B or 4B of the periodic table of the elements that is preferably producible by a high temperature hydrolysis such as flame hydrolysis for example." The term has been given its broadest reasonable interpretation consistent with this definition.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1795

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "lithium atoms attached to said atoms via an oxygen bridge" in line 5. This limitation is indefinite as it does not specify which of the two groups of atoms (i) or (ii) is attached to the lithium atoms. It appears to the examiner that the claim intends to recite that group (i) is bridged with oxygen, though it is unclear if additional oxygen atoms are implied by the claim, or if the bridging oxygen atoms are from group (ii).

Claims 2-6 are re rejected under 35 U.S.C. 112, second paragraph as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 102 and 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 18, 24-27, 30 and 49 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Inda et al. (U.S. Pat. 6,475,677).

Art Unit: 1795

For claims 1, 6, 18, 24, 30 and 49, Inda et al. teaches a pyrogenic oxidic powder composed of particles comprising atoms of (i) Al, *inter alia*, and oxygen atoms, an element of groups 3A, 4A, 3B or 4B of the periodic table of the elements, and (ii) oxygen atoms. See col. 4 line 54 et seq. Note that a powder having a specified grain diameter is specifically disclosed. See col. 5 lines 62-63.

For claims 2 and 25, the oxide is comprised of the elements silicon and aluminum. See col. 5 line 46.

For claims 1, 3, 4, 26 and 27, and notwithstanding the 35 U.S.C. 112, second paragraph rejection for the limitation drawn to lithium atoms bridged to the atoms via oxygen (discussion above), while Inda et al. does not explicitly teach this feature or the feature drawn to lithium being present on the surface or interior of the particles, since an identical source of lithium is used by Inda et al. such as applicant's disclosed lithium carbonate, and since the patentees also react the mixture at a high temperature, it would naturally flow for the particles in Inda et al. to have, inherently, the same bridging of lithium atoms with oxygen as claimed and present on its surface and interior as claimed, absent of a showing by applicant that the claimed invention distinguishes over the reference. *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977) and *In re Spada*, 15 USPQ 2d 1655 (Fed. Cir. 1990) Reference is made to the specification on page 9 and Example 1 of Inda et al. in col. 5 line 42 et seq. Furthermore, Inda et al. specifically disclose that the particles are of a predominant crystal phase which are further crushed by a ball mill to micron-sized grains; the three-order difference in magnitude between the crystal and the particles would result in lithium atoms being present throughout the entirety of the particle.

Art Unit: 1795

Claims 5, 28 and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Inda et al. (U.S. Pat. 6,475,677).

The teachings of Inda et al. are discussed above.

As to the claimed surface area, absent of unexpected results it is asserted that this is an optimizable parameter for a result-effective variable. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) Inda et al., for example, disclose that the grain diameter of the particles directly affects its dispersion and resultant conductivity and mechanical strength. See col. 3 line 10 et seq.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 1795

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

/Julian Mercado/
Examiner, Art Unit 1795

/PATRICK RYAN/
Supervisory Patent Examiner, Art Unit 1795